

**ARIZONA STATE PARKS
NATURAL AREAS PROGRAM ADVISORY COMMITTEE
(NAPAC)**

Minutes of the meeting held:
Thursday, November 29, 2007

at:
Casa Grande Parks and Recreation Department
404 E. Florence Ave., Casa Grande, AZ

A. CALL TO ORDER AND ROLL CALL

Chair Hare called the meeting to order at 12:06pm. The following people were present, and the Committee achieved a quorum.

Committee Members Present: Trevor Hare, Chair
Sheridan Stone, Vice-Chair
Phyllis Hughes
Don Young *via telephone*
Linda Kennedy
John Hays
Jared Underwood
Max Castillo *ex-officio*

Committee Members Absent: None

Other Individuals Present: Joanne Roberts, Arizona State Parks (ASP)
Bob Casavant, ASP
Ariel Hiller, ASP
Dan Shein, ASP
Ruth Shulman, ASP

Guest: Paul Audley, Trust for Public Land (TPL)

B. INTRODUCTION OF MEMBERS AND STAFF

Members and Staff introduced themselves.

C. OLD BUSINESS

1. Approval of NAPAC Minutes for the July 26, 2007 meeting.

Dr. Kennedy requested brief clarifications to the discussion on hunting in the Sonoita Creek State Natural Area (SCSNA). Mr. Hays moved that the minutes be approved with the requested changes as noted by Dr. Kennedy regarding clarification on page 7. Mr. Stone seconded the motion, which carried.

2. Discuss Member Participation, including Subcommittees, Site Visits and the Meeting Calendar.

Chair Hare opened the discussion by noting the lack of quorum for a couple of past meetings, and light attendance at others. He took the opportunity to address member commitment in an eMail to NAPAC, with the intent of assessing the meeting schedule and whether members are still able to continue with the schedule. He also noted that NAPAC has set goals for itself for the year, and there will similarly be a lot of work in the coming year, so he is happy to see everyone participating at this meeting.

Ms. Shulman noted that responding to the quorum call eMail is an important part of being able to determine whether a meeting will be held. Several steps were agreed upon to help the process: continuing to issue the first draft of the agenda along with the initial quorum call, providing members with multiple copies of the eMail if they provide more than one eMail address, marking eMails as “high priority”, following up on responses through various channels, and keeping to the time schedule of providing the draft agenda two weeks prior to the next meeting.

Ms. Hughes mentioned that setting quorum for the subcommittee meetings is also important and asked who are the members of the various subcommittees. The subcommittee rosters are as follows:

Land Acquisition Selection Criteria (LAS): Trevor Hare, Phyllis Hughes, Don Young, Joanne Roberts, Ray Warriner; Natural Areas Management Guidelines (NAMG): Linda Kennedy, Sheridan Stone, Trevor Hare, Max Castillo, Joanne Roberts.

A quorum of either subcommittee consists of more than 50% of the members of the subcommittee. The general consensus is that ASP Staff cannot be counted toward quorum. Ms. Shulman will follow up with Joy Hernbrode, Assistant Attorney General for ASP, to clarify this information, as well as determine how to deal with a quorum of NAPAC forming at a subcommittee meeting.

The LAS subcommittee’s main task of forming a process to prioritize acquisitions should be finished shortly, and that subcommittee could then be dissolved.

The discussion moved to scheduling the meeting dates for the upcoming year. The fourth Thursday of each month seems to work out for the majority of the group, as does retaining alternate months for subcommittees and the whole committee. Mr. Stone suggested scheduling dates, and then “dividing up” who is meeting when at a later date.

The dates chosen for next year are: January 25-26 for Verde River site visits (these are a Friday and Saturday), February 28, March 27, April 24, May 22, June 26, July 24, August 28, September 25, October 23, November 20 and December 18.

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Ms. Roberts noted that NAPAC's subcommittees should handle the majority of the work to be done this year. It may be that the full NAPAC committee should meet quarterly, and the subcommittees should meet accordingly. Chair Hare noted that once subcommittees complete tasks, they should dissolve and new subcommittees be appointed.

Dan Shein noted that Ray Warriner has a list of important properties for the Land Acquisition subcommittee to visit and evaluate.

Chair Hare noted that it would be advantageous for the group to continue switching between full NAPAC meetings and subcommittee meetings every other month. Ms. Roberts said that adding another ecologist has reduced the amount of time she spends traveling and will have more time to address the work of the subcommittees along with the subcommittee members. The subcommittees should be the workhorses of NAPAC this year in order to finish the tasks before them. Chair Hare suggested that the subcommittees meet on a single day if possible. Travel times based on various locations were discussed, because of the fact that members live across the state.

Ms. Roberts said that the work that happens outside of the meetings is a main determinant of how efficient the subcommittee meetings are. Tasks are divided up during the meetings, and follow-up should be paramount for the members who have volunteered to carry out the tasks. Ms. Roberts suggested revisiting the concept of a time-table showing the tasks and when they need to be accomplished. Mr. Stone noted that there should be a minimum efficient time to meet, as well as a maximum time after which the law of diminishing returns kicks in. That optimum meeting time seems to be three hours. Chair Hare said that the February NAPAC meeting should be held in Phoenix.

Ms. Roberts suggested that she and Ms. Hughes carry out a telephone conversation or an eMail exchange using the research Ms. Hughes has carried out on the land acquisition prioritization request. Ms. Hughes says that she is open to the idea, but would like a better feeling for how NAPAC as a whole thinks the process should work. Chair Hare said the developing a draft of the process would form the basis of a dialogue for the group. If much of this work is done before the next physical meeting, that would lessen the amount of time of any physical meeting.

Chair Hare noted that scheduling set dates for site evaluations monthly would be important. Ms. Hughes suggested that different days for different people may be viable. However, Ray Warriner should be included in this conversation.

Further discussion revolved around clarifying subcommittee meetings for January. A tentative date of January 24th for a meeting of the NAMG subcommittee was not set. Chair Hare suggested that a "team" from the southern end of Arizona do site evaluations around the Santa Cruz River the same weekend that a team from northern Arizona could do the site evaluations along the Verde River. Chair Hare

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said that “doing the homework” of the subcommittees in between physical meetings could result in a month with no meeting, which may be viewed as an incentive.

Ms. Roberts will send a reminder to each subcommittee member regarding each task assigned or volunteered for shortly. She also noted that there is a plan to develop a “comment sheet” on the ASP website.

Jared Underwood noted that he was interested in working with the Land Acquisition subcommittee. The topic of quorum for subcommittees was reiterated, as was the wording of an agenda for a subcommittee meeting where a full NAPAC quorum may attend.

Ms. Roberts will send out the task list by the end of week of December 7 or the beginning of the next week. Further agenda items will be scheduled. Ms. Roberts and Chair Hare will develop a charter for each subcommittee.

In answer to a question from Dr. Young, Ms. Roberts noted that the scope of the LAS subcommittee is to develop a prioritization process. The current site evaluation process is relatively simple to use, and is similar to forms used by many different states for their natural areas. Ms. Roberts will follow up with Dr. Young individually.

3. Discuss Presentation to ASPB on Request to Establish Kartchner Caverns Conservation Zone.

(A copy of the PowerPoint presentation is available upon request.) Dr. Bob Casavant discussed the potential for resources conservation in areas in-and-around Kartchner Caverns State Park. KCSP represents significant hydrologic and geo-hydrologic processes in need of protection.

The information in this presentation is meant to eventually be shared with ASP Executive Staff and the ASP Board with an eye toward forming a Kartchner Caverns Conservation Zone that will help protect water resources, and unique geological formations in and around the Park, and economic resources in the form of the Park itself.

Development of the caverns began with several pre-development surveys by scientists in several disciplines. Geologic and hydrologic studies conducted prior to 2001, and ongoing similar studies within the past three years show that the geology, geo-morphology and hydrology of the cave and the surrounding limestone “block” are far more inter-related with the entire Whetstone Mountain complex than originally thought

The new geological information consists of insights into the fracture patterns and geologic forces that formed the caverns and how this information affects the water table and the water flow. Basically this means that the hydrology of the entire

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mountain front is highly interconnected. The entire area is also much more highly faulted than was originally thought in the early studies.

The 1990 pre-development geology study had noted this extensive faulting; in 1991 a subsurface map of the cave area showed shearing and horizontal displacement in the limestone block. At the time it was thought that the limestone block was surrounded by granite, which led to the layout of KCSP. However, in 1995 a well drilled on the property hit limestone. It was felt that the limestone in the well location did not connect with the caverns.

In 2001 a new study showed that the blocks were more highly fractured than had been thought previously. The fracturing and fault lines have been found to extend much further out as well. Scientific modeling demonstrates that the limestone block extends as much as ten miles NE-SW of the caverns, meaning that the caverns are connected to the surrounding landscape (from the Mustang Mountains to the I-10). The modeling also suggests that there are other caverns below the Park.

The faulting and fracturing, as well as the extensive limestone blocks, have repercussions on the cave hydrology as well as the potable water supply for KCSP and its neighbors. As well, it's probable that any changes in the hydrology of the area will affect not only the Park's caves, but those undiscovered caves that lie around and beneath.

At the end of 2006, a well study suggested that at Well #2 on the Park, the water level would fall below the pump level in 4-6 years. When the well was drilled, as mentioned before, it was considered unconnected to the caverns; however the current geologic studies show that is unlikely.

The next step was to consider the water situation outside the Park and what may need protection there as well. Recently, with the aid of Cave Unit Rangers, a study was performed showing that wells on the adjacent State Trust Land have also drilled into limestone. The study also showed that all wells are on the decline, however the rate of decline varies for each well due to the different faults and fractures in the area.

Each of these factors led to the conclusion that if changes in the water levels not only in the Park but in the surrounding area continue, the Park will become non-viable, not only ecologically but economically. With this information in hand, the reaction of the community has been taken into account and the community should also be part of any future plans.

Dr. Casavant suggests that future acquisitions for the Conservation Zone should extend as much as a mile in any direction around the Park. This would take into account watershed, connectivity to the river, and water sources, including potable water. Dr. Casavant shared information on the surrounding land parcels with ownership and a potential prioritization. Alternatives to acquisition by outright purchase were discussed, such as conservation easements, or land leases.

Following discussion of next steps, it was decided that Chair Hare, Mr. Stone, Dr. Young and Dr. Casavant will meet with ASP Assistant Director Jay Ream before making a presentation to the ASP Board for buy-in and direction. NAPAC is mindful that creating a Kartchner Caverns Conservation Zone will set a precedent for Arizona State Parks.

4. Project Issues Report Updates.

Ms. Roberts said that this item was added to the agenda in order to ensure that NAPAC was completely up-to-date on anything that happened during the meeting hiatus. Chair Hare asked about the monitoring of San Rafael Conservation easement, to which Ms. Roberts said there is little progress. Ms. Roberts said that the 2006 grassland monitoring report prepared by Dr. Ruhle has not been finalized yet, and cannot be without further input from Mr. Humphreys. The 2007 grassland monitoring is complete for both the fee simple and easement properties. Additional riparian and post fire data was collected on the fee simple property. The 2007 Reports are in preparation.

Dr. Kennedy noted that there is a typo on Topic Six regarding the NAPAC Vision Statement. This will be corrected before the next Project Issues Report is sent out.

Ms. Hughes suggested that the list be reorganized to move inactive/closed topics to a separate area for ease of review. Dr. Kennedy said that topics that have been closed for two years should be removed, and new information should be highlighted so members could focus on the changes.

Mr. Hays asked whether the Rio Rico parcels on the Santa Cruz River was a closed topic. This conversation could be agendized.

Ms. Hughes noted that topics 17 and 20 need to be updated. Ms. Roberts noted that topic 17 relates to the Kartchner Caverns Conservation Zone discussed today. Ms. Hughes asked whether there were any vacancies that needed to be filled this year. Ms. Shulman noted that no terms expired this year.

Mr. Stone noted that committee members are responsible for moving any topic from the Project Status Report to the agenda.

D. NEW BUSINESS

1. Consider Presentation Time Limit.

If a potential presenter comes to NAPAC, we will let them know they are limited to 15 minutes maximum, not including Q&A. If NAPAC invites a presenter, we will ask them how much time they anticipate needing, including a Q&A session. In either case, potential presenters will be advised ahead of the meeting that presentation time will be limited.

2. Introduction of Ariel Hiller, Resource Ecologist and Overview of Genevieve Johnson as the new Open Space Coordinator.

Ariel Hiller is the new Resource Ecologist for ASP. She was recently hired as the second Resource Ecologist, and will provide support to those State Parks located north of I-10 across the state. She has an extensive Arizona history and experience in land management from positions with the BLM and NPS. She is also experienced in restoration and rehabilitation.

Dan Shein discussed Genevieve Johnson and her role in ASP. Currently she is working on a resource inventory. At the moment she is attending the Governor's Growth Cabinet meetings. Her role is statewide, and is not really limited to the Parks. A NAPAC member asked if it would be possible to obtain a scope of Ms. Johnson's work. Mr. Shein will provide the information shortly. Chair Hare also suggested inviting her to the next NAPAC meeting.

3. Brief Update on Peck's Lake.

Ariel Hiller and Max Castillo shared presenting the information. (A copy of the presentation and supporting documents is available upon request.)

Ms. Hiller noted that one part of the presentation handout is a list of sensitive species found in the Peck's Lake area. The area is considered critical habitat and home to several sensitive species. Further information on habitat and species will be available in the near future when it comes from the Arizona Game & Fish Department (AGFD).

Mr. Castillo began with some statistics on the Peck's Lake area. He said that Peck's Lake is an oxbow lake of the Verde River, and is the only oxbow lake in the state of Arizona. The lake is fed by springs that emerge from the local limestone on the right side of the river ("river right"). The lake was augmented in 1920 by a "tunnel" that fed-in water from the Verde River. This led to the establishment of a recreation area, which lasted until 2004 when the Town of Clarkdale did not elect to renew its lease with Phelps-Dodge.

Ms. Hiller said that the springs feeding the lake are called Shay Springs and are close to the boundary with Tuzigoot National Park. She then noted that the property under discussion includes the oxbow lake and approximately six river miles to the north.

Ms. Hiller said that she felt the property met the Natural Areas eligibility criteria in the following ways:

- 1) Some parts of the property are largely undisturbed. Those areas that have been disturbed have good potential for restoration.

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- 2) There are sensitive species located in this critical habitat, per AGFD.
- 3) This is a significant riparian community/biological community for the state.
- 4) Peck's Lake is significant hydrologically for the oxbow lake and the springs.
- 5) This area is significant as connectors to two National Forests and as wildlife corridors.

Ms. Hiller also included in the packet information on plants and wildlife found in the area, partially based on surveys done in Tuzigoot NP, which borders on the Peck's Lake area. Much of the wildlife is also found in the wildlife.

Mr. Castillo noted that there are several anecdotal reports of mountain lions in the area, as well as elk. Otter scat has been identified, as well as sightings of raccoons, javelina, and deer among many others. The Tavasci Marsh is also an Important Bird Area designated by the Audubon Society.

Ms. Hiller went on to note plants she saw in the area: water lilies, cattails, willows, in addition to cottonwood-willow riparian growth in the six river miles north. There is also mesquite scrub upland, along with Christmas cholla cactus. Non-native plants include Ailanthus, Russian olive, Bermuda grass, Russian thistle and more. This would be an opportunity to partner with other land management agencies in the area to control the non-native plants. Ms. Hiller is a certified applicator for weed-killer.

Mr. Castillo addressed the acreage, as well as the cultural and recreational history of the area. The Archeological Conservancy has a small inholding in the 2,000 acres under discussion, as well as the Alvey family inholding near the old TAPCO site. The area around the lake is about 900 acres; the remaining acres are located on the six river miles north. The Archeological Conservancy inholding is a set of Indian ruins near Tuzigoot. Phelps-Dodge, who owned the entire area for decades, also used one "wing" of the oxbow to contain their mine tailings. This portion of the lake is not under consideration for purchase and is not part of the area under discussion. This results in a loss of 165 acres from the 900 mentioned previously. The property also includes the Clark Mansion and a former golf course with clubhouse. The Clark Mansion is more than likely listed on the National Register of Historic Places. The mansion may need a new roof, but it seems to be constructed of poured concrete.

Dr. Young said that he has two concerns about the property: 1) it's hydrologically unstable, and 2) the possibility of contaminants from the mine tailings. Ms. Hiller said she feels level one and two site assessments are necessary to determine what pollutants exist at what levels. She also noted that grants are available to pay for these assessments. Ms. Roberts also noted that Phelps-Dodge has said they are doing some remediation of the area.

Dr. Young also noted that the property might be expensive to remediate and keep up. Mr. Castillo said that there may be funds available through AGFD because they

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currently consider the 1920 tunnel as a fish barrier to keep the non-native fish out. (Although the meeting tape references the term ‘tunnel,’ NAPAC members understand that the structure is definitely a fish barrier.)

Ms. Hiller noted that the old golf course as well as the significant history of other recreation in the area has contributed to disturbances in the area. One problem is the escape of non-native grasses. She noted the possibility of successful partnerships with land management agencies in the restoration of the disturbed areas. Also, during the tenure of the Town of Clarkdale recreational lease, they built four picnic ramadas in the area, which remain in decent shape. Once the lease expired in 2004 and Clarkdale elected to not renew, the area ceased being an approved recreation “zone”, leading to recreation trespass. Ms. Hiller feels that this is a relatively benign trespass, as opposed to the trespass by Off-Highway Vehicles in the six river miles north. Active and sturdy barriers will need to be erected around the points where OHVs currently access the space. Ms. Hiller has experience with designing and erecting such barriers.

Paul Audley has been in direct contact with Phelps-Dodge about this transaction, which includes discussions regarding a formal option including environmental insurances. The TPL does not own property, but rather provides expertise and assistance for agencies to acquire property.

A Q&A session followed during the slideshow of area photographs. Mr. Castillo said that efforts to eradicate non-native plants have begun in Tuzigoot. Mr. Underwood asked how far the tailings were from their source. Mr. Castillo noted that Phelps-Dodge had pumped the tailings across the river.

Mr. Stone asked about the Alvey family inholding and the size of the acreage. Mr. Castillo will provide that information shortly. The Archeological Conservancy inholding is on the upland. The Verde River serves as the boundary between Prescott National Forest and the Coconino National Forest. Mr. Castillo also pointed out the right-of-way of the Verde Valley Railroad.

Further discussion followed on the history of Phelps-Dodge and potential, unrealized development in the area, including the partnership with the Town of Clarkdale. Dr. Young asked about the price of the land; Mr. Audley noted that this information is not settled yet. Negotiations continue. There was also further discussion on designations under consideration by the National Forests and the National Park Service.

Mr. Stone asked what sort of recreational opportunities the Town of Clarkdale might expect. Ms. Hiller said that right now, birding is very popular. At the moment, birders on that land are currently trespassing, however if the land were saved from development, and if there were public areas open, the Town would be quite happy. Clarkdale is open to helping with enforcement on the property.

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Ms. Roberts noted that there were several properties in addition to this particular area that should be visited by NAPAC members relatively quickly. Ray Warriner, who feels that the site visits would take perhaps two days and recommends setting aside that time, provided this list. Chair Hare noted that there may not be funds available to purchase each of the properties and would like to see some prioritization done. Ms. Roberts said that the evaluations made after visits would help to provide the prioritization context.

Further discussion followed on timing of visits, the amount of funding available in the Heritage Fund for purchases and the TPL assistance. ASP Executive Staff is currently in negotiation with TPL. Ms. Hughes noted that the issue of indemnification regarding the mine tailings should be looked at very closely when optioning any property.

Mr. Castillo noted that the best way to make the Peck's Lake transaction work would be to recruit Phelps-Dodge as a partner. This would be a win/win/win for the community, the ASP Natural Areas program, and Phelps-Dodge.

Discussion of dates to conduct evaluation visits resulted in setting January 25-26th. Maps, GPS information and invitations to TPL and TNC will be forthcoming.

(NAPAC adjourned for a break at 1:51pm and reconvened at 2:05pm.)

E. SUBCOMMITTEE REPORTS

1. Natural Areas Management Guidelines (NAMG) committee: Update and report on progress.

(The Subcommittee reports were dispensed with in the interest of time.)

2. Update from Selection subcommittee including discussion.

(The Subcommittee reports were dispensed with in the interest of time.)

F. PUBLIC COMMENT

None.

G. BOARD COMMENTS, REQUESTS, AND ITEMS FOR FUTURE AGENDAS

Revisit the hunting issue at some time in the future compatible with AAG Joy Hernbrode's schedule; develop a scope of work of the Land Acquisition subcommittee and discuss the scope of each subcommittee; status of Rio Rico parcels on the Santa Cruz River.

H. TIME AND PLACE OF FUTURE MEETINGS

Land Acquisition Subcommittee, January 25-26, Verde River Greenway and environs.

I. ADJOURNMENT

Chair Hare adjourned the meeting at 4:49pm.

Prepared by Ruth Shulman on December 3, 2007, and reviewed by Joanne M. Roberts,
Arizona State Parks NAPAC Coordinator, on December 18, 2007.

APPROVED BY A UNANIMOUS VOTE OF THE NATURAL AREAS PROGRAM
ADVISORY COMMITTEE ON FEBRUARY 28, 2008.

Affirmed by:

/s/ Trevor Hare
Trevor Hare, Chair

Date: February 28, 2008